

REMARKS

The Examiner allowed claims 5, 6, 13, 14, 19, 20, and 27.

The Examiner rejected pending claims 1-4, 7-12, 15-18, and 21-26 as obvious (35 U.S.C. §103) over Pirahesh (U.S. Patent No. 5,548,758). Applicants traverse the prior art rejections for the following reasons.

Independent claims 1, 9, and 17 require transforming data in an input table in a database in a server in communication with a client by: receiving from the client a transform command indicating an input data table name in the database and at least one rule indicating at least one cell in the input table to transform and a transform operation to perform with respect to the at least one cell; accessing a copy of the input table from the database; and transforming, within the server, data in the accessed input table according to each rule specified in the transform command.

First off, Applicants note that Pirahesh generally does not concern transforming data in an input table according to rules as claimed. Instead, Pirahesh concerns how to optimize an SQL query, not transfer data in an input data table in a database. Applicants submit that optimizing an SQL query is a different type of operation than transforming data in an input table as claimed.

The Examiner cited col. 3, lines 29-38 as teaching the claim requirement of transforming, within the server, data in the accessed input table according to each rule specified in the transform command. (Third Office Action, pg. 3). Applicants traverse.

The cited col. 3 discusses the steps for execution of SQL statements. An application plan for the compiled SQL statements is generated which concern how to get the data the user wants. The cited col. 3 discusses how generating the access plan considers available access paths, such as indexes, sequential reads, etc., and system statistics on the data to access to choose the most efficient access path.

Nowhere does this cited col. 3 anywhere teach or suggest the claim requirement of transforming data in the accessed input table according to each rule specified in the transform command. Instead, the cited col. 3 concerns how to develop an application plan to execute an SQL query, not how to transform cells in an accessed input table according to rules specified in a

transform command. Nowhere does the cited col. 3 anywhere mention transform commands having rules to transform data in an input table. Instead, the cited col. 3 concerns something entirely different, how to optimize the execution of an SQL command.

The Examiner cited the “where clause” discussed in col. 4, lines 38-60 of Pirahesh as rendering obvious the claim requirement of receiving from the client a transform command indicating an input data table name in the database and at least one rule indicating at least one cell in the input table to transform and a transform operation to perform with respect to the at least one cell. The Examiner found that the “where clause” renders obvious this claim requirement because the “where clause” contains a search condition that must be satisfied by each row in the result table to form an intermediate set that is further processed according to the select clause. (Office Action, pg. 3) Applicants traverse.

The cited col. 4 discusses a WHERE clauses that determines which rows should be returned and a SELECT statement that provides yet further predicates to use to select rows from a table to return. Pirahesh notes that the SELECT statement determines the columns that will be returned from the table identified in the FROM clause. (Pirahesh, col. 4, lines 20-26).

The cited col. 4 concerns an SQL statement to return specific data from rows of a table. Nowhere does this cited section anywhere teach or suggest a transform command indicating cells in an input table and a transform command to transform data in the input table according to the transform operation. Instead, the cited col. 4 discusses rules used to query a table to return data from that table. Nowhere does the cited col. 4 anywhere suggest transform operations to actually transform data in the input table.

The Application defines the term “transformation” as the process of filtering, merging, decoding, and translating source data to create validated data, such as converting data, applying mathematical or logical operators on the values of data, etc. (Application, col. 2, lines 13-26) Nowhere does the cited col. 4 anywhere teach or suggest a transform command indicating a transform operation to transform data in the input table indicated in the command. Instead, the cited col. 4 only concerns how to query and return data that satisfies conditions specified in the

query WHERE and SELECT statements, no transformation of data, as that term is defined in the Application, is suggested.

The Examiner further cited the join operation discussed on col. 4, lines 52-60 of Pirahesh. (Third Office Action, pgs. 3-4) The cited col. 4 notes that a join operation involves concatenating rows from different tables. Applicants submit that the cited join operation is different and does not teach or suggest the claimed transform operation which comprises altering data in cells in an input table. A join operation does not transform data in cells in an input table, but instead concatenates rows of data from multiple tables to perform a search with respect to the joined rows.

Moreover, the claims require that the received transform command indicate at least one cell in the input table to transform and a transform operation to perform with respect to such cell. The cited join operation does not indicate at least one cell in an input table to transform according to an indicated transform operation. Instead, a join operation concerns concatenating rows of a table, not performing transformations on cells in an input table.

Accordingly, claims 1, 9, and 17 are patentable over the cited Pirahesh because the cited Pirahesh does not teach or suggest all the requirements of these claims.

Claims 2-4, 7, and 8; 10-16, and 18-21 and 26 are patentable over the cited art because they depend from claims 1, 9, and 17, respectively, which are patentable over the cited art for the reasons discussed above. Moreover, claims 2, 4, 7, 8, 10, 12, 15, 16, 18, 21, 22, and 26 provide additional ground of patentability over the cited art.

Claims 2, 10, and 26 depend from claims 1, 9, and 17, respectively, and further require that the client is a client computer that communicates with the server over a network, wherein the transform command is transmitted from the client computer to the server over the network. The Examiner cited col. 1, lines 12-13 of Pirahesh as teaching the additional requirements of these claims. (Third Office Action, pg. 4) Applicants traverse.

The cited col. 1 mentions database systems performed by computers and the optimization of queries. Nowhere does this cited col. 1 anywhere teach or suggest the claim requirement that a

client computer transmits a transform command as claimed to a server over the network to transform data within the server as claimed.

Accordingly, claims 2, 10, and 26 provide additional grounds of patentability over the cited art.

Claims 4, 12, and 18 depend from claims 1, 9, and 17 and further require that the transform command rules specify multiple transform operations to perform on at least one cell in the accessed input table. An application of a subsequent transform operation following a previous transform operation on one cell transforms previously transformed data in the cell. The Examiner cited col. 6, lines 21-26 of Pirahesh as teaching the additional requirements of these claims. (Third Office Action, pg. 5) Applicants traverse.

The cited col. 6 mentions an early-out join where each row in the outer table is joined with at most one row in the inner table so that less rows need to be joined. Nowhere does this cited col. 6 anywhere teach or suggest the claim requirement of rules specifying multiple transform operations on cells in an accessed input table to transform the data, as the term transform is understood. Instead, the cited col. 6 only concerns a join operation which concerns concatenating rows from different tables, not transforming cells in an input table as claimed. Again, Applicants submit that joining rows from different tables does not teach or suggest transforming cells in an input table as claimed.

Accordingly, claims 4, 12, and 19 provide additional grounds of patentability over the cited art.

Claims 7, 15, and 26 depend from claims 1, 9, and 17 and further require that the client cannot affect the execution of the transform command during the execution of the transform command, whereby the transform command executes in the server independently of the client. The Examiner cited col. 9, lines 7-15 of Pirahesh as teaching the additional requirements of claims 7 and 15. (Office Action, pg. 5) Applicants traverse.

The cited col. 9 discusses how to perform an inner join operation. Nowhere does the cited col. 9 anywhere suggest that a client cannot affect the execution of the transform command so that the command executes independently of the client that provided the transform command

to the server. The Examiner appears to take the position that because the cited join process is a self contained operation, a client cannot affect the execution of the operation. (Third Office Action, pg. 5) Applicants submit that this cited section still nowhere suggests the claim requirement that a client cannot affect the execution of the transform command the client transmitted to the server. The fact that the cited col. 9 discusses a self-executing join operation does not suggest that a client could not interrupt or affect the execution of this join operation.

Accordingly, claims 7, 15, and 26 provide additional grounds of patentability over the cited art.

Claims 8, 16, and 21 depend from claims 1, 9, and 17 and further require that the transform command comprises multiple rules, wherein each rule specifies at least one column in the input table and at least one transform operation to perform on each specified column in the input table. At least two rules specify different columns in the input table and different transform operations to apply to each specified column. The Examiner cited page col. 9, lines 31-40 of Pirahesh as teaching the additional requirements of claims 8, 16, and 21. (Office Action, pgs. 5-6) Applicants traverse.

The cited col. 9 discusses steps to perform a join operation. When the join is executed, a check is made to see if the join is an early-out join. If so, the one match from the inner table is output for each row of the outer table in the join. Again, the cited col. 9, like other sections of Pirahesh, just discusses how to join rows from different table. Nowhere does the cited col. 9 anywhere teach or suggest a transform command having multiple rules, where each rule specifies one column at one transform operation to perform on each specified column, where at least two rules specify different columns in the input table. Instead, the cited col. 9 concerns performing a join operation, which involves concatenating rows from different tables, not the claim requirements of transforming data in different columns in an input table according to rules in a transform command.

For these reasons, claims 8, 16, and 21 provide additional grounds of patentability over the cited art.

Claims 22-25 include many of the distinguishing requirements found in claims 1, 4, 6, and 8 in data structure format, and are patentable over the cited art for the reasons discussed with respect to claims 1, 4, and 6.

Conclusion

For all the above reasons, Applicant submit that all the pending claims 1-27 are patentable over the art of record. Applicants submit that no fee is needed. Nonetheless, should any additional fees be required, please charge Deposit Account No. 50-0585.

The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.

Dated: February 19, 2003

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